

ITEMS OF INTEREST.

VOL. X.

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NO. 11.

Notes from the Profession.

AMERICAN DENTAL ASSOCIATION—SOUTHERN DENTAL ASSOCIATION. JOINT MEETING, 1888.

Reported for ITEMS OF INTEREST, by "Mrs. M. W. J."

The joint meeting of the American and Southern Dental Associations, held in Louisville, Ky., August 28, to September 1, 1888, was largely attended by members of both associations. The spirit of the meeting was harmonious and fraternal. The distinction between North and South was wiped out forever. The papers offered were of scientific value and the discussions animated.

The program as published in the journals was quite closely adhered to. Separate meetings were held by each society for the transaction of business, the joint meeting at 9.30 A. M., and 7.30 P. M., being devoted exclusively to the reading and discussion of papers.

But little business was transacted in either association beyond the usual routine—payment of dues, election of new members, etc. In the American Association a resolution was adopted declaring it non-professional to place anything on a card except name, title and address.

In the Southern Association measures were taken to collect a fund for the defence of the suits against the International Tooth Crown Co.

In both the Southern Association and the joint meeting resolutions were adopted to memorialize Congress to remove the duty from all dental goods, instruments, materials, appliances, etc.—the tax working a hardship on both the profession and the people.

The deaths of Drs. J. H. Prewitt, 1st Vice-President of the Southern Association; Dr. Geo. W. Keely, Treasurer of the American Association; Drs. Stoddard Driggs, I. H. DeVore, Wm. Dutch, C. P. Fitch, H. M. Grant, A. S. Franklin, were announced and memorial resolutions adopted.

Election of officers was held, with the following results:

AMERICAN ASSOCIATION.—President: Charles R. Butler, Cleveland, Ohio.

First Vice-President: A. W. Harlan, Chicago.

Second Vice-President: S. A. White, Savannah, Ga.

Corresponding Secretary: F. A. Levy, Orange, N. J.

Recording Secretary: George H. Cushing, Chicago.

Treasurer: A. H. Fuller, St. Louis.

Saratoga was selected as the place of meeting.

SOUTHERN DENTAL ASSOCIATION.—President: J. Y. Crawford, Nashville, Tenn.

First Vice-President: John C. Story, Dallas, Texas.

Second Vice-President: Wm. N. Morrison, St. Louis, Mo.

Third Vice-President: J. S. Thompson, Atlanta, Ga.

Corresponding Secretary: D. R. Stubblefield, Nashville.

Recording Secretary: M. C. Marshall, Little Rock, Ark.

Treasurer: H. A. Lowrance, Athens, Ga.

Galveston, Texas, was selected as the place of meeting.

The exhibits of dental goods were very large and handsomely displayed, the Female High School Building affording ample facilities for everything connected with the meeting. The exhibitors were the S. S. White Co., Gideon Sibley, R. S. Williams, H. D. Justi, Welch Dental Co., American Dental Manufacturing Co., Keller Medicine Co., Claudius Ash & Sons, Lambert Pharmaceutical Co. (Listerine), Florence Manufacturing Co. (Ideal Brushes in five sizes).

The Commercial Club issued cards of greeting, opening their club rooms to the members, giving information as to the points of interest in the city worthy of visit, giving admission to those places where entry-cards were required, and an invitation to an excursion on the Ohio River. The plate-glass works at New Albany were visited by a large party. Railroad rates were reduced and return tickets extended ten days, to allow all those who wished to visit Mammoth Cave on the most favorable terms. The weather was unpropitious, very warm and close, with almost incessant rains. With this sole exception the meeting was everything that could be desired in every respect.

Joint meetings were held daily, at 9 30 A. M. and 7 30 P. M., presided over by Drs. Abbott and Catchings, alternately.

Under the head of

OPERATIVE DENTISTRY

Four papers were read.

Porcelain Inlays, by Dr. W. Storer How.

Attaching Artificial Crowns, by Dr. J. J. R. Patrick.

The Conductivity of Filling Materials, by Dr. E. Edmond Kells, Jr.

Inexpensive Crowns, by Dr. Gilmer.

The papers of Drs. How and Patrick were passed without discussion. The paper of Dr. Kells was illustrated by a delicate thermostat, connected with an electric bell. A small disk was placed sufficiently

near the bell for its expansion by heat to cause it to touch the bell, thereby closing the circuit and ringing the bell. On the disk were placed successively a tiny cell consisting of the enamel shell of a molar tooth, and others modelled on this in size and shape, made respectfully of gold, amalgam, oxychloride of zinc cement, and gutta-percha. A drop of warm water in the enamel cell failed to ring the bell. Water of the same temperature on the gold caused an instantaneous ring, as did the amalgam cell. The oxychloride responded more slowly, the gutta-percha requiring a very long interval, showing, however, that the latter is not absolutely a non-conductor, though generally so considered.

Dr. C. N. Pierce considered these experiments, though interesting, inconclusive as regards anything practical, as the physiological or pathological condition of the tooth was ignored.

A lengthy discussion of the proper treatment of exposed or diseased pulps, pulp capping, pulp extirpation, root filling, etc., followed this lead. Nothing new was elicited. Those who cap pulps and are satisfied with the evidence they have had of success will continue to cap pulps. Those who have only failures, and advocate the extirpation of the pulp, will cap no more.

Dr. Gilmer's method of constructing a cheap crown for those who cannot afford the gold band and porcelain crown, or all gold crowns now in use, is substantially as follows: For posterior teeth a platina band is fitted to the prepared root and filled with modelling compound, and bitten into to secure proper articulation. Being carefully trimmed, and a post inserted if desired, the model is invested in plaster. When the wax is removed Weston's or Watt's metal is poured, and a serviceable, cheap and easily constructed crown is ready for attachment to the root. For anterior teeth a porcelain facing or plate tooth and gold band may be used.

HISTOLOGY AND MICROSCOPY.

Two papers were read. One from Prof. Wilson, entitled:

The Apical Foramen in its Physiological and Pathological Relations.

Professor Wilson said that microscopical examination of the apical portion of the cement shows it to be thicker and more vascular at the apex, the lacune being larger and more numerous, with smaller Haversian canals. When by thickening of the cement the blood supply is cut off from the pulp, there is increased nutrition around the roots; the function of the membrane increases. Thus the devitalization of the pulp does not interfere with the vitality of the cement.

But the life of the apical portion of the cement may be destroyed and necrosis ensue. This is usually the result of the use of arsenic. The cement being dead nature disposes of it by the solution

of the lime salts. A second or third application of arsenic is liable to lead to even more serious results. A more thorough investigation of this practice would doubtless lead to safer practice.

Dr. Atkinson pronounced this paper *an awakener*, bearing closely on the occult movements in nutrition and denutrition.

When Dr. J. W. White was preparing his manual of *materia medica*, he tried to get him to leave out arsenic; but he put it in as something that could not be dispensed with. Dr. Atkinson said it was strange that men were not more alive to investigation, but they take hold with fear, because they don't know, and are ashamed to say they don't know. They don't understand the difference between inflammation and ordinary activity. They don't know how arsenic acts, except that they can get money out of it! It is through the affinity of arsenious acid for the protoplasmic tissue of the pulp, and depends on how much semi-fluid matter there is. If there is only a legitimate quantity it will sleep till Gabriel's trumpet. There is a strong conviction that microbes enter into tissue territory and set up retrograde fomentation; they make a hell—raise Ned!

The ancient Prophet prayed that he might be delivered from the memory of his former sins; but we have had a better illumination, and pray that we may remember them that we may avoid them. When we have extracted a tooth and find the end of the root roughened, we say "all right, that was a tooth that had to come out;" but a better way would have been to have got at the end of the root and simply washed it with salt and water, and kiss the patient good-bye—all would have been done.

But men want to use the devil a little more, and sin enough to be worth repentance, that they may truthfully cry, "I *have* sinned."

Dr. Story (Dallas, Tex.) said that for twenty years he had been trying to learn how to do better, and do without arsenic. It is no use to tell us not to use arsenic, unless we are told what to use in its place. (The discussion was closed before this practical point was reached.)

[Concluded in December ITEMS.]

Dr. E. Parmley Brown in England.—Has concluded a very successful series of clinics at the United States Exchange Office, Strand. He has demonstrated the practicability of bridgework composed entirely of porcelain (he condemns the metal bridge work on the score of uncleanness). We understand that some members of the profession have carried away in their mouths specimens of this "all-porcelain" bridgework, and have promised to be present at the Manchester meeting. Many were heard to express themselves highly satisfied with what they saw, and certainly Dr. Brown's method of contouring gold was extremely rapid.—*Dental Record, Eng.*

THE JOINT MEETING OF THE AMERICAN D. A. AND THE SOUTHERN D. A.

LOUISVILLE, KY., Sept. 1, 1888.

The joint meeting, arranged for between the American D. A. and the Southern D. A. in this City, convened on the 28th ult., and has just closed.

Though the Executive Committee, as well as the Local Committee, did all they could to secure a large attendance, there were but about 235 present, including the members of both Associations, which is far less than was anticipated. About one-third of those present were from the American, the other two-thirds were from the Southern. The local Committees are entitled to the thanks of all who were present for their well directed efforts to make the meeting both pleasant and profitable. None could have done more, and few Committees could have done as well. Then, too, the members of the "Southern" appreciated fully that the meeting was being held on Southern soil, and they had on their best clothes, and had a pleasant word and a right hearty Southern welcome for all their Northern visitors. All, I am sure, felt at home, and will have none but pleasant remembrances of their visit to Louisville. In fact, it takes the Southern people to do just the right thing at the right time in the way of hospitality. The weather has prevented the full enjoyment of some of the pleasures that had been prepared for the visitors. The evident disappointment and regret that this has caused the Kentucky dentists, has awakened for them a sympathy and the kindest feeling, as well as an appreciation of their efforts to make our visit a pleasant one.

That Louisville is a beautiful city, and that Kentucky has more fine horses and beautiful women than is to be found in any State in the Union, goes without saying; and any one who could spend four days here without experiencing keen enjoyment is too destitute of those finer feelings and frailties of humanity, to ever make a good dentist. I have heard it said, too, that in Kentucky is manufactured the best whisky that is to be found in the country; but as it is not to be supposed that any one who writes for, or reads the "Items" ever drinks it, or can judge of its merits, I say nothing about it. The joint meeting of the Associations was held in the Young Ladies' High School Building, and a more convenient place for the meeting could not well have been found in any city.

The dental manufacturers were well represented at the meeting, and they presented many new and useful things for examination. To the credit of the exhibitors it should be said that, so far as it was practicable, they kept their doors closed and dentists were kept out of their rooms during the session of the meeting. They seemed to

appreciate the importance of the regulation prescribed by the Executive Committee, and tried to conform to it.

As per program, Dr. Catching of the Southern presided at the morning session, and Dr. Abbott of the American presided in the evening. That they both made excellent presiding officers was admitted by all. They each gave quite acceptable annual addresses. The one by Pres. Abbott was on a scientific subject, while that of Dr. Catching was on the Relations of dentistry to Medicine, claiming that dentistry was a specialty in medicine, and that dentists should have a broader and better grounded medical education than is taught in most of our independent dental colleges; that our dental schools should be in connection with medical colleges, and that the fundamentals of a regular medical education should be taught to dental students as fully as they are to those who propose to graduate in medicine; that no difference should be known in regard to these things between the dental and the medical students.

To these views strong opposition was made by some of the teachers in our dental colleges. They were in favor of keeping our dental schools separate from the medical colleges, and for making dentistry an independent profession. Others stood strongly for the doctrine of the address, and it was plain to see that a large majority sympathized heartily with the views of Dr. Catching. There was no mistaking the fact that a great change has taken place in the views of a large majority of our better class of dentists within the last four or five years. The importance of a better medical education on the part of all future graduates is being generally admitted by all whose opinions are worth considering. To this end, our colleges are being urged to change their lecture terms from two courses of five or six months each to three terms of six or seven months each. The sentiment in favor of this change, outside of a few of our teachers in low grade colleges, seemed to be general; and unless some unexpected movement takes place, this sentiment will soon become so general and the demand so imperative in favor of the change, that no college can retain a respectable standing with the profession that does not comply with it. It is, however, a source of satisfaction to know that some of our colleges are fully alive to the importance of this change, and have already made it, while the others are inclined to give the question favorable consideration. With this increase of terms and lengthening of courses, there will be more time for the general and special study and teaching essential to the practice of dental surgery as a medical specialty, a department of surgery as Dr. Harris claimed that it should be.

There is not time to speak of the papers presented at this meeting, farther than to say that, as a whole, they averaged above those

generally presented at the annual meeting of the American. There seemed to be a little good natured strife as to which society should present the most able papers; but we leave the question of merit to be decided by those who were present, and those who shall read the transactions when published.

When the discussions are published, it will be seen that there was less inclination than at former meetings to accept the ideas, or dicta, of certain parties as final—as truth beyond all question. “That fellow from Texas,” as well as some others, wanted the “I say so,” and therefore it must be true, to make the truthfulness of certain claims more clear.

How it was so in the Southern, the writer is not aware; but in the American there was less of politics than usual, and the officers elected seemed to be satisfactory to all, though “Chicago got there just the same.”

Everything went off pleasantly, and it is well that the long talked of “joint meeting” has been held, still it will be just as well in the future, for the meetings of the two Associations to be held separately.

Yours Truly, W.

GEORGIA STATE DENTAL SOCIETY.

Twentieth Annual Meeting. Reported for ITEMS OF INTEREST, by “Mrs. M. W. J.”

The Georgia State Dental Society convened at Dalton, August 22, 1888. President, R. H. Patterson, D. D. S.

The meeting was opened by prayer, followed by a most cordial address of welcome from Dr. R. W. Thornton, which was responded to in his usual happy style by Dr. Sid. Holland.

The President in his address spoke of the great work accomplished by state societies in procuring the enactment of Dental Laws for the protection of the people from quackery and incompetency, and the elevation of the standard of college education through the demands of Examining Boards.

A paper from Prof. John F. Coyle (Thomasville, Ga.), on “Dental Education,” was read and discussed at some length by Drs. Tignor, Colding, Holland, White, Carpenter, Barfield, Thornton, Palmer and Dr. Main, (M. D.). The discussion was mainly on the recommendation of Dr. Coyle, that the Society instruct their representatives in the National Board of Examiners to recommend a two years’ pupilage with a competent preceptor as a basis for admittance to matriculation. The suggestion of Prof. Coyle was not adopted, on the ground that it was impracticable, the best class of operators not being able to instruct students without doing injustice either to their patients or to the students.

The class of dentists most ready to take students are those who have a large practice in rubber work and who need assistants in the laboratory.

Dr. Sid. Holland spoke at some length on the subject of

CHEMISTRY,

and its importance to the dentist who wishes to keep abreast with the progress of the age.

The President, in his address, having recommended the appointment of a standing committee on Addresses to the Public on Dental Hygiene, this subject was discussed at length by Drs. Burt, Campbell, Carpenter, Whittaker, Morgan and Crawford (Nashville), Thornton, Colding and others; its importance both to the public and the profession, being unanimously admitted, though opinion was greatly divided as to the best means of reaching the desired end.

Dr. D. D. Atkinson (Brunswick) read a paper on

THE DENTAL PULP,

and Dr. H. H. Johnson (Hawkinsville) one on

THE TREATMENT OF DEVITALIZED PULPS.

Both papers were highly commended; the latter was pronounced one of the best ever written, for concise, clear statement of methods and close adherence to subject in hand—viz., teeth devitalized by the application of arsenic. After devitalization, he waits a week for sloughing to take place; then removes the nerve with a Donaldson's broach, enlarges the canal with Gates Gliddon drill, dries with warm air, treats with Eugenol exclusively, and fills the canals with oxychloride of zinc. His reasons for each step taken and for each remedy employed were clearly stated, and all questions asked answered promptly and decisively.

The papers were discussed very fully by Drs. Crawford and Morgan of Nashville, and Drs. White, Colding, Catching, Thornton, Tignor, Holland and others.

Dr. Crawford defined the dental pulp as a ganglion—a bundle of nerves, so located as to be entirely protected from external injuries, and not endowed with tactile power, with no sense of heat or cold, and able only to transmit a sense of injury to the brain; but not to define to either diagnosticism or patient the nature of the injury, the pain being from nervous reflex action—like that of the iris to which it is wonderfully near of kin. He said it was fortunate that it was not essential to the duration of the tooth that the pulp should retain its functional activity after maturity.

Dr. Morgan said that the secret of success in the removal of devitalized nerves lay in waiting for the line of demarcation to be drawn between living and dead tissue, and in toughening the latter

with tannin, creosote, etc. He looked upon the Gates Gliddon drill as a delusion and a snare (in which opinion most of those present agreed). He cautioned against excessive drying of the dentine as causing the latter to contract away from the over-arching enamel rendering it liable to crack and scale off.

Drs. Smith, Catchng and others were opposed to drilling out canals, as liable to go through the apex, or through the side. Canals which are too small for a drill to enter and require enlarging do not need filling. Various root-filling materials were advocated, principally gold wire, lead, orange-wood, oxychloride and gutta-percha.

Dr. Crawford defined clearly the classes of cases to be treated, viz.: Simple devitalization without complication; blind abscess or incomplete fistula; complete fistula; also three conditions which will give trouble, viz.: Imperfectly filled canal, leaving a reservoir which will have an accumulation of offensive matter; the passage of offensive matter beyond the apex, as the point of an instrument or filling material; pumping through of septic matter. He emphasized the point that it is not so much what the canal is filled with, as to be certain that the apex is absolutely sealed.

Dr. Morgan would drill his canals out sufficiently to remove the tubuli of the dentine with their semi-fluid contents which are liable to decomposition, having only the cementum which is nourished from the outside. He would fill the apex with gold wire, flattened and beveled, which, if forced through, will be encysted and give no trouble. The root should be reached through the fistula, and all roughness smoothed off.

MENTAL PROSTHESIS

was discussed at length, Dr. E. F. Adair reading a paper on

ARTIFICIAL DENTURES, WHICH THE BEST?

Continuous gum was, of course, commended as *the best* when its weight is no objection, and when the cost can be afforded. Next he ranks gold with rubber attachments. Black rubber is the best for those who cannot afford a higher class of work. Red rubber and cheap dentistry were roughly handled, Dr. Crawford speaking against the latter with great animation and emotion.

Drs. Holland, Campbell and Carpenter defended the proper use of red rubber in its proper place, as the friend of the poor man, like his hickory shirt and jean pants. All cannot wear broadcloth and fine linen, and all cannot afford continuous gum or gold plates.

The best method of taking impressions of difficult cases was discussed. Dr. Holland takes such impressions in two parts, taking the portion inside of the teeth first, trimming, cutting suitable grooves, etc., and oiling and varnishing before replacing in the mouth and

taking the outer portion. From the two properly joined the cast is made.

A very lengthy paper, from Dr. E. Parsons (Savannah), on

THE PATHOLOGY OF CARIES,

was ordered spread on the minutes without reading, and the thanks of the Society tendered the venerable author.

Dr. J. Y. Crawford (Nashville) spoke at length on

THE INFLUENCE OF THE WISDOM TEETH IN CAUSING DISEASES OF THE RESPIRATORY TRACT.

He said that he was not a laryngologist; but that he had on record striking observations on the effects of the eruption of the wisdom teeth in bringing about affections of the throat, tonsillitis, inflammation of the mucous membrane lining the respiratory tract, lung troubles, etc., the primary lesion being of a traumatic nature, as from the closing of a cusp on the other jaw causing a pinching or induration of the tissues; from thence inflammation passes to the tonsils, which fail to secrete their lubricating fluids, and the throat becomes chafed and ulcerated, the tissues are changed from a normal to a hyperplastic structure which the organism can never entirely absorb: hence a permanent disability. He believes that, barring out hereditary tendency to phthisis pulmonalis, a large per cent of the above affections are due to the eruption of the wisdom teeth, similar effects being also sometimes traceable to the eruption of the twelfth year and the sixth year molars. He commends this subject to the attention of the profession, especially the younger members, as offering a wide field for observation and usefulness, in arresting serious results from an apparently trivial cause.

Dr. Gordon, (M.D.) Dalton, agreed with Dr. Crawford that the wisdom teeth are a prolific source of the troubles mentioned, and that the importance of the condition of the mouth and teeth had hitherto been greatly underestimated by physicians generally.

The subject was discussed by Drs. Carpenter, Catching, Colding, Morgan and Tignor.

This concluded the scientific discussions, as the hour for election of officers had arrived.

Tybee Island, near Savannah, was selected as the next place of meeting. Dr. S. A. White (Savannah) was elected President; Dr. W. F. Tignor, 1st Vice-President; Dr. J. A. Thornton, 2d Vice-President; Dr. L. D. Carpenter, Cor. Secretary; Dr. H. H. Johnson, Rec. Secretary; Dr. H. A. Lowrance, Treasurer.

Simplified Spelling.—In examinations of licenses to teach, the Superintendent of Education of Nova Scotia will accept spelling as amended by the linguist's 24 rules (phonetics).

ROOT FILLING.

DR. J. MORGAN HOWE, NEW YORK.

Just now I believe gutta-percha is the most popular material for root fillings; the fact that it is so easily forced into the finest canals, and seems to fill all interstices so completely and with so little trouble or expenditure of time, has great influence with many. But the great shrinkage of gutta-percha, even when used solid, in perfectly accessible places, seems to be overlooked, and the fact,—that no doubt many have observed though I have not seen it noted,—that all root fillings of gutta percha smell offensively in every fiber, after having been in place a year or more. I say all, because I have had occasion to examine many, inserted by myself and others, and have always found them, and the dentine around them offensive, and preferred to remove them rather than seal in a bad odor.

If it be claimed that success in treatment warrants continuance of the practice, I can only reply that teeth often do well for an indefinite time with no root filling, or with one that is far from being as complete a filling of the canals as could easily have been accomplished with a little more care; or with a cotton filling; but no one will for that reason defend leaving roots unfilled or only half filled, when they might have been filled much more perfectly; and but few, I think, will defend cotton root fillings, for regular practice. The suggestion has been advanced also that a root filling should be of such a character that it can be removed without difficulty, when there is need to do so from recurrence of inflammation. This assumption that root fillings cannot be expected to maintain an aseptic condition of the canal, or that the pericementum is so liable to recurrence of inflammation from the abnormal condition existing, that one should by this be influenced in the use of a material, is I think a mistaken view, and is specially liable to influence the thoroughness of the operation. Expectation of ultimate failure must invite it, by keeping before the mind the chances of undoing the work. I would claim for root filling that it is one of the most certain operations in dentistry; and that when the root is in proper condition in ordinary cases, it should be filled with the best material that can be properly inserted for excluding everything else and maintaining an odorless and aseptic condition, and that choice of material should not be influenced by consideration of its removal. Gutta-percha may be the best material for the purpose, but I cannot believe that with such shrinking properties, and such facility of absorbing gases or fluids, the tissues beyond the apical foramen may not eventually be debilitated by the gaseous emanations, so as to make them unable to resist bacterial proliferation; a thoroughly tight filling of cotton would be as good I should think for exclusion of organisms,

and could not permit absorption to a more objectionable extent. I prefer to use gutta-percha in roots only in those very minute extremities of canals where nothing else can penetrate so well,—considering it better than no filling,—and for stopping large foramina, because it is non-irritating and can be inserted with more accuracy than other materials; but for filling the greater part of such, and of all root canals, oxychloride of zinc seems to me preferable; its disinfecting qualities are desirable and seem to be continuous. I have never examined a root filling of this kind that had any odor, nor was the dentine malodorous,—it ranks high as an antiseptic also, and teeth whose roots are filled with it generally preserve their color better, and remain without any tendency to peridental irritation longer, so far as my observation goes, that when filled with either gutta-percha or cotton. When it can be used I prefer tinfoil for occluding foramina, to prevent possible irritation of living tissues beyond by zinc chloride, and use gutta-percha in the smallest quantity that will serve this purpose, only when tin cannot be employed satisfactorily. While I am willing to admit that systemic conditions do exist that prevent as full a measure of success in the treatment and filling of the roots of some teeth as we all deem desirable, I think the number of such cases is so few as to fully justify a general expectation of complete success, and the employment of materials and methods without any expectation of failure in view. Whenever doubt leads to less perfect methods, or less suitable materials, it must in a measure conduce to the failure it anticipates.—*N. Y. Trans.*

THE IMPLANTATION OF TEETH IN ARTIFICIAL SOCKETS.

DR G. W. WELD, NEW YORK.

It seems to me that all the advocates and enthusiasts of the implantation of teeth can hope for in the way of success is to be compared only with the success which, in the past, has been associated with replanting and transplanting. The experience of a number of our professional brethren who have experimented in this direction under favorable conditions has, in the large majority of cases, resulted only in failure.

Of course it may be argued that the operation is altogether new, and that transplanting is no criterion by which the success, or non-success, of *implanting* can be judged. To some extent this may be so. It has been said for M. Pasteur in his novel cure for hydrophobia that no one, without experience, could rightfully gainsay his propositions, till time had demonstrated either their truth or falsity. So far as this argument goes, both M. Pasteur and Dr. Younger have had an advantage over those who have taken exceptions to their methods.

It is possible, so far as Dr. Younger's practice is concerned, that more time will be required to determine its worth.

Admitting that a tooth may be retained in a new socket made in the alveolus is only to acknowledge the sequel, or the succeeding part of transplantation.

Let us briefly analyze Dr. Younger's progress and present position on the subject.

First.—His experience dates from the 13th of June, 1885—a little less than two years, and about the same length of time that those who have experimented in transplanting begin to realize that the ultimate end of all their efforts is a failure.

Second.—He claims that he has had wonderful success; but every one who has transplanted has had and claimed, at first, the very same thing.

Third.—The want of success in transplanted teeth has been caused by the absorption of their roots; a condition of affairs which Dr. Younger, in one case, has admitted that he has observed on the roots of *implanted* teeth. Thus we find, in looking at the practice from a practical standpoint, that while the Doctor cheerfully recommends for adoption implantation, as being more permanent than transplantation, he, at the same time, "out of his own mouth," virtually places it on the same level.

With this understanding of the question it seems hardly necessary to touch on the *rationale* of the process of repair. Those who have experimented and made observations, and tabulated their results, know that the roots of either a replanted or transplanted tooth will, after some time, in a great majority of cases, become partially absorbed, and that this is the direct cause of their "dropping out." Dr. Waters, of Boston, who has experimented largely in this direction, found this condition in almost every case.

It does not seem reasonable to suppose that Dr. Younger's theory regarding the reattachment is well founded, or that it will ever be adopted by the profession. In fact he has already in a frank and good-natured manner acknowledged that he "had to make a theory" to fit the case, and that the theory of revitalization of the pericementum suggested itself to him as being the most natural. It seems more probable that when an implanted tooth becomes reattached to the jaw bone it is only in virtue of its being tolerated as a foreign body precisely as other foreign bodies in other parts of the system have been known to be tolerated, and become incapsuled. That an implanted tooth is tolerated, and temporarily incapsuled in the jaw, is unquestionably a fact; but this, by itself from a practical standpoint, proves nothing regarding its future, inasmuch as both replanted and transplanted teeth, as above stated, are similarly retained.

In an article recently published in the "*American System of Dentistry*," I have stated that the process by which the "erosions on the roots of replanted teeth are formed is not fully determined. Dr. Rollins states that "the microscopical changes wrought by it cannot be distinguished from the absorption seen in deciduous teeth with living pulps," and claims that "these lunar excavations seen in teeth with *dead* pulps are produced, as they are admitted to be in teeth with *living* pulps, by the agency of living cells."

This is the teaching of modern pathology, the probability being that these cells, "giant cells," or "osteoclasts," secrete erosive fluids, which, acting on the organic as well as the inorganic constituents of the devitalized tooth substance, produce their gradual decomposition, solution and absorption. The process has its parallel in the erosion found on osseous sequestra which have been imbedded in living tissue.

The conclusions which I have arrived at with regard to the practice and phenomena of replantation (which hold good either for implantation or transplantation) may be thus summed up :

First—"That these teeth will, as a rule, speedily reattach themselves, and become firm in the alveolar sockets from which they were taken ; but the length of time they remain in a useful condition varies in each case, and is dependent on the constitution and age of the patient and local and systematic conditions.

Second—"That a full vital relation may sometimes, though rarely, be re-established ; but that usually it exists only during that period of time after extraction when the root approximates a natural and normal condition, and terminates with the death of the peridental membrane and the protoplasmic constituents of the cement and dentine ; the tooth then becoming a foreign body, and gradually undergoing disintegration through the action of giant cells or osteoclasts.

Third—"That devitalization of the peridental membrane, cement and dentine usually speedily follows replantation, the tooth being then retained in position by fibrous connective tissue and the granulations from the soft tissues penetrating the lacune and canaliculi of the cement.

Fourth—"That the severance of this connection and the failure the operation may be caused either by the gradual loosening, resulting from continued oscilation, or to the supervention of acute inflammatory processes to be arrested only by the removal of the foreign body.

Fifth—"That in view of the possibility of danger and the certainty of ultimate failure attending this class of operations, the practice of replantation, either for the purpose of filling sensitive cavities, the treatment of neuralgia, or of alveolar abscess, or for the purpose of engrafting porcelain or other crowns, is unjustifiable."—*N. Y. Trans.*

A FEW ITEMS OF IMPORTANCE.

[From the Committee on Dental Practice in N. Y. Society.—E. Parmley Brown, C. F. W. Bodecker, W. C. Barrett.]

DR. E. PARMLEY BROWN, FLUSHING.

The Perry Separator.—The Perry separator has come, and come to stay, doing much good where properly filling its mission; but being also capable of doing much harm and becoming in the hands of the reckless an instrument of torture when used where not indicated. Many days of soreness to the parts about the teeth on which it is used may follow, but skilful work by the operator may in most cases enable him to dispense with extensive separating. The highest degree of skill may be displayed by the best restoration with the least degree of separation, the desired result of close knuckling being equally well attained. The separators are specially valuable where time cannot be had for securing space with cotton; but your chairman has adopted the universal practice of late years, of packing cotton between the teeth for a slight separation, which is thereby obtained with the least discomfort of any system that he has ever seen, and at the same time fulfilling the double mission of producing space and driving the gum away from the locality of the work by the expansion of the cotton fibres—a few drops of Calvert's No. 1 carbolic acid and oil of cloves, in equal parts, being applied to the cotton when so used. This medication assists materially in obtunding and allaying irritation of the parts. In very close contact, where it is desirable to use the cotton, it may be thoroughly placed by being driven between the teeth with a steel wedge and a hand mallet.

THE KNAPP BLOW-PIPE.

The late birth of the powerful Knapp blow-pipe, whereby nitrous oxide and illuminating gas are united in marriage, producing the hottest thing yet known to the dental world, and facilitating the use of porcelain and the metals in crown and bridge-work, is another advanced step in the march of our profession. The blow-pipe has been perfected by the manufacturers; and the small furnace for baking teeth, in connection with it, we are promised immediately. Though the blow-pipe may be too powerful for ordinary soldering work, yet for supplying heat for the new furnace for porcelain work it promises to prove a great blessing.

THE E. PARMLEY BROWN PORCELAIN BRIDGEWORK.

After two years' constant use of the E. Parmley Brown porcelain bridgework, your Chairman wishes to say unhesitatingly that he believes that he has builded even better than he knew. In mouths where the gold bridgework could not be tolerated on account of a diseased condition of the gums, produced by

contact with the metal, the porcelain in contact with the gums is tolerated without the slightest irritation; but exactly why this is so, the inventor is not as yet prepared to state. Recent examinations of several cases inserted over two years ago encourage the inventor more than his most sanguine expectations promised. The anchorage of short bridges into strong, firm teeth, by imbedding the bar running through the porcelain teeth into solid gold fillings, is strong and satisfactory beyond the belief and comprehension of those who have neither done the work, nor seen it done thoroughly; and further, for natural appearance inside and outside of the arch, there is nothing that approaches it. This system of bridgework may be used in all its varied ways without infringement on any other patents, and will be withheld from the unprofessional advertisers, being licensed, at a moderate fee, to those who practice according to the Code of Ethics.

COCAINE.

Your Committee seem somewhat divided in its opinion of the recently introduced cocaine. Dr. Bodecker pronounces it of no value in the excavation of teeth, but of great service for use on the soft tissues, the removal of deep-seated calculary deposits and necrosed bone. Your chairman found it of no value in the excavation of sensitive teeth till used in connection with carbolic acid and oil of cloves, the cocaine being carefully kept from the margins of the cavity, as the hydrochloric acid in the solution has great affinity for the lime salts in the tooth-substance, enamel, or dentine; and he has found by experiments on some difficult cases of excavation where the sound tooth-substance had to be removed for the anchorage of bridgework, that the application of these obtundants—cocaine, carbolic acid, and oil of cloves—not only relieves the temporary aching of the tooth (where the rubber dam is applied), but that they soften the tooth-substance, making excavation painless to the patient and easy for the operator till the zone of affected tooth-material is removed. Your Chairman has found the cocaine valuable in two other operations of great importance to the dentist: In connection with arsenic where a diseased pulp is to be destroyed and removed in a few days, none of the usual tormenting pains attending or following the application; and also where it is desirable to remove a living pulp immediately—a few applications of the cocaine making the operation painless in a few moments.

THE PERRY-WEBER DENTAL ENGINE.

The Perry-Weber dental engine seems to be a great and valuable addition to dental machinery.

IMPLANTATION.

Replantation and transplantation seem to have come to life again, and implantation to be a child born to them. Replantation, it is well known, has been successful in but a small percentage of cases in the past; and transplantation successful in but a very small percentage. In implantation, Dr. Bodecker says he has little faith as yet. He does not believe a new socket is formed; and he is trying to obtain a section of a socket in which a tooth has been implanted, to examine under the microscope, in which he has not succeeded, owing to obvious difficulties. Dr. Bodecker's opinion in regard to implantation is that the temporary union between the tooth and the walls of the newly made socket is merely a mechanical cementation, in which opinion your chairman coincides; and he may astonish you by stating that he performed the operation of implantation seventeen years ago when a superior central incisor was implanted in the place of a split "nubbin" of a superior lateral just extracted, because the space was much too wide for a lateral, and the socket had to be considerably enlarged to receive the central. A new socket was thereby practically made. Success was promised at first, but in a year or more the tooth came out suddenly and without any warning, though the root and the surrounding parts were in a healthy condition.—*N. Y. Trans.*

ARSENICAL TEETH.

DEAR EDITOR: This item I noticed lately and send it to you for your opinion. I have studied the manufacture of porcelain teeth for the past eighteen years, and do not know of anything of the kind being used; but if some unprincipled manufacturer does use it, I think it the duty of every dentist to know it and give their teeth a wide berth:

A correspondent of the St. Louis *Globe-Democrat* writes: "I have read a great deal in the papers about the slow poisoning processes, but only believed the various statements when they were brought home to me. My wife, who had been remarkable for her rugged health and rosy appearance, began to fade away. She dwindled to a mere shadow, and yet she reiterated statements of good health. Finally, I insisted on calling in a doctor of high standing, after an emphatic protest from our regular physician. A long diagnosis decided that my wife was suffering from arsenical poisoning drawn into the system from a cheap set of artificial teeth, which had been incerted about a week before the first symptoms of weakness had been observed. Arsenic had been used in the enamel to secure the glittering whiteness so much admired by woman, and in the process of mastication small particles had been absorbed in the food and taken into the stomach, where the insidious work of destruction was progressing surely to a fatal termination."

Will you kindly publish this, and your opinion on it, and oblige,
Forest City, Iowa. DR. WM. H. STEELE.

We hardly think it probable.—ED ITEMS.

THE GLANDS.

[Dr. C. W. Spalding in *Western Dental Journal*.]

The true glands, may be divided into *secretory* and *excretory*, the former supplying the fluids useful for the purposes of the body, and the latter taking from the passing blood injurious substances and removing them from the system. Of the former we may mention the salivary, the mucous or muciparous, the gastric, peptic, pancreatic, biliary; Peyer's, Bruner's, and Leiberkühn's glands, in the alimentary canal.

The principal glands found in the skin are the sebaceous, sudoriparous, ceruminous, and meibomian. In other parts of the body are the prostate, the mammary, the synovial or mucilaginous, the lachrymal, and in the testes the seminal, through whose agency the species are propagated, while the brain itself may be considered as being of the nature of a gland, deriving from the blood, as it does, the nervous force for the vital purposes of the body.

The lymphatic glands, called conglobate, are classed as absorbent; but they have functions that are not clearly understood.

The ductless glands are the thyroid, the thymus, the suprarenal capsules, and the spleen.

Glands vary in size from about four pounds in weight to a size so small as to be visible to natural vision only when fully distended.

The largest gland is the liver. This immense gland has secreting functions that are peculiar. It secretes bile, that is carried away by the bile ducts, and glycogen, which does not enter the bile ducts, but passes, in some modified form, directly into the blood stream through the hepatic veins. Besides its glandular functions, the liver acts as the great storehouse of the carbo-hydrates, receiving and retaining these products of intestinal digestion and giving them out into the blood in such proportion as the wants of the body require.

The dentist is more directly interested in the functions of the glands of the mouth. These, in man, are divided into salivary and mucous, and together these two classes furnish the mixt saliva of the mouth. The salivary consist of three pairs, the parotid, the submaxillary, and the sublingual. The mucous glands of the mouth are all of the same general character, and derive their names from their respective locations. The same is the case with the mucous glands of other parts, as trachial, esophagal, uterine, vaginal, etc. The mucous glands of the mouth are the labial, lingual, buccal, palatine and molar. On the tongue, besides the mucous glands, there are serous glands, located near the circumvallate papille, which secrete saliva, and near the tip of the tongue are mixt (muco-salivary) glands, which furnish a mixture of mucus and saliva. The mucous glands are situated in the submucous

tissue, and in form they are branched (recemose), tubular glands. Their secretions contain mucin, and are acid in chemical reaction.

Pure saliva, which can only be obtained from the parotids, is always alkaline in reaction, and the mixt saliva of the mouth becomes acid only when the proportion of mucus is in excess, or when decomposition of epithelium, salivary corpuscles, or the remains of food takes place. The salivary corpuscles are a little larger than white blood corpuscles, and are capable of molecular movements.

Other elements of saliva are calcium carbonate, from which tartar is chiefly formed, small quantities of sulpho-cyanide of potassium or soda, and some organic substances, of which that peculiar ferment, ptyaline, is the most important. Mucin is absent in pure saliva, and for this reason it is thin and clear.

The submaxillary always contains mucin, because in this gland we have both serous and mucous acini, the one secreting saliva and the other mucin; the serous, however, are far the most numerous.

The sublingual saliva, though containing much mucin, is strongly alkaline in reaction, and abounds in salivary corpuscles. So the saliva of the mouth is a mixt substance, derived from the secretions of the salivary, the mucous and other glands, and is more active than is that from any one gland. It should have an alkaline, or at least a neutral, reaction. Its inorganic constituents, besides those before mentioned, are sodium and potassium chlorides, potassium sulphate, alkaline and earthy phosphates, and ferric phosphate.

In diabetes mellitus it contains lactic acid, resulting from the decomposition of grape sugar. This acid dissolves the teeth, causing diabetic dental decay. In new-born children there is a scanty secretion of saliva till after two months of age. During this early period the diastatic ferment is not secreted by the submaxillary gland, nor by the pancreas; hence, young children should not be fed on starchy food. For the digestion of milk the diastatic ferment is not required. As you well know, at a later period a copious secretion of saliva accompanies the eruption of the teeth.

At the red margin of the lips are a number of sebaceous glands, which serve to lubricate the red surface of the lips.

Stimulation of the oral glands may be effected in various ways. If the facial nerve is stimulated at its origin, or the chorda tympani at the peripheral end, a profuse flow of saliva follows.

On stimulation of the sympathetic a small flow of thick saliva occurs, abounding in mucus and salivary corpuscles. These facts show that the nerves exercise an effect on the secretions of all the glands of the mouth.

The secretion of the saliva is largely a reflex act. When rapid

substances are introduced into the mouth a copious flow of saliva takes place. The movements of mastication cause a similar flow, yet during the act of drinking, when this act is continued for any considerable time, the secretion of saliva ceases. The smell or the very thought of savory food causes a rapid flow of thin saliva, and thus the common expression, "the mouth waters," is literally true. During sleep there is no stimulation of nerves, and consequently no secretion of saliva. If the mouth is held open during wakefulness, the flow of saliva is as great, if not greater, than when the mouth is closed; but during sleep, if the mouth is open, it becomes dry. Again, if the nerves are divided, secretion stops, and in paralysis the quantity secreted is greatly diminished.

The ductless glands elaborate substances, which they secrete or excrete by infiltration.

The circulation of most of the glands of the body is very energetic, as the abundance of their blood-vessels and their frequent morbid alterations show.—*Western Journal*.

ACCURACY AS A CONDITION OF SCIENTIFIC PROGRESS.

DR. J. SMITH DODGE, JR., M. D., D. D. S., NEW YORK.

In the New York Society of 1879.

The number of things which a practising dentist ought to know threatens to become overwhelming. Those who can remember the novelties introduced within the last twenty-five years will be equally astonished, on making the survey, that such a revolution could occupy within such a time, and that any art could endure such a revolution and yet remain essentially the same. It is now about twenty-five years since the profession began to appreciate the cohesiveness of pure gold, and to use this quality in filling teeth. One of the first results was a demand for more perfect dryness than any previous means afforded, and the imperative demand produced that masterpiece of invention, the rubber dam. But the rubber dam does not always choose to stay where it is put, and further invention easily produced the numberless brood of clamps and their adjuncts, till the problem of dryness was fully solved, and one of the greatest difficulties of careful filling absolutely abolished. From the first suggestion of cohesive filling, the more daring minds had conceived of operations never before imagined; and with each added facility the ideal grew more and more exacting. Of course, new tools were requisite to perform these new operations, and the engine inevitably followed. But the engine, invented to do what had been previously conceived, presently enlarged, without limit, the conception of what might be done. It now became possible to do to a tooth, within practical limits of

time and labor, anything of a mechanical nature which the operator might desire; and as the engine put the form and substance of the tooth wholly within the dentist's power, so the whole range of malleting inventions—from blows that would nail a box to the vibrations of the electric mallet—made it possible to give any conceivable bulk and shape to fillings.

Now, all this is a bare outline of only a single course among others along which dentistry has been developing. If we proceed to fill in this outline with the infinite varieties of filling materials, hand instruments, office furniture and other appliances which group themselves naturally about these salient features, we will grow bewildered. But when all this is done there remain at least two co-ordinate lines of progress not yet suggested and equally prolific. Quite as full a statement might be made of the evolution of mechanical dentistry which touches at so many points various industrial processes of general application. And again, on the other side of operative dentistry, spreads the vast field of anatomical, physiological and histological research, industriously cultivated through all these years, and fruitful of results which may, indeed, seem remote from our daily work, but which some new pathological condition may, at any moment, thrust imperatively before one's face as the one thing he needs now to know. But even when these three strands are twisted into a single conception, the whole is not stated. For this process of advance rolls forward with unceasing increase. Every capital discovery comes to us pregnant with a brood of auxiliary novelties, and so far are our present attainments from completeness that each of them seems to multiply, so that there is probably no one thing of which all dentists are so sure as that the progress of the dental art has only begun.

No man can say or guess what theory of his will be exploded next week, nor what favorite method of practice may have to be dropt and a new one learned instead. It is all we can do to hold our ground, and yet, at any moment, the bugle may sound an advance.

Fortunately, we are not the first among men to meet the same trouble, and the way of escape, while it is not easy, is well known. The growing intelligence of mankind, since the dawn of the twelfth century, and especially for the last four hundred years, has been beset by a swelling flood of individual facts in all departments of knowledge, and has had, in respect to the entire field of human observation and action, just that difficulty of retaining and using its acquisitions which now besets the narrower area of the dental profession. Mankind long ago found the solution of the problem which is called Science. The urgent need of dentistry at this day is that it become,

not so much a separate science, for it is too composite for that, but through and through, and in all its details, scientific. For science is like the fairy tent in the Eastern tale, which could be held at need in the palm of one's hand, and yet expanded in another moment to shelter an army. Science may, this morning, be focalized on the slender margin of a proximal filling, and this afternoon formulate the universe.

THE LEGAL STATUS OF DENTISTS.

DANIEL NASON, ESQ., NEW YORK.

Mr. President and Members of the Dental Society of the State of New York:

The first reference in the statutory law of England to anything pertaining to the practice of dentistry is found in an act, entitled: For Barbers and Surgeons, passed in the thirty-second year of Henry VIII. By the third section of this act any one who "uses barbery or shaving" in the city of London, its suburbs, and with'n a circuit of one mile is forbidden "occupying any surgery, letting of blood, or any other thing belonging to surgery, drawing of teeth only except."

The subject finds no further mention on the English statute books till 1858, when the necessity for some improved system of dental education having become more fully recognized, power was given to Queen Victoria to grant a charter to the Royal College of Surgeons of England authorizing that body to institute and hold examinations for the purpose of testing the fitness of persons to practice as dentists and to award certificates of such fitness.* In the following year the charter was granted, and under it dentists to a certain extent received a statutory status; but they were in no sense placed on an equal footing with medical men. The title "dentist" was not protected in any way; nor was the practice of dentistry restricted solely to persons holding certificates from the Royal College of Surgeons of England, as the act itself expressly declared that nothing therein contained should be construed to prejudice or affect in any manner the lawful occupation, trade, or business of dentistry.† The statute, moreover, did not entitle dentists to registration under the Medical act, and, as a consequence, though they might recover their reasonable charges for work and labor done and materials supplied, they could not recover such charges in the right of their holding certificates from the Royal College of Surgeons.‡

Thus the law continued till the Dentists act was passed in 1878.§ This act first sets forth the expediency of making provision for the

* 21 & 22 Vict., c. 90, s. 48.

† S. 55.

‡ Greenwood, Laws, 60.

§ 41 & 42 Vict., c. 33.

registration of persons specially qualified to practice as dentists in the United Kingdom and for otherwise amending the law relating to dental practitioners, and then provides, that, from and after the first of April, 1879, no one, under a penalty not exceeding £20, on conviction, excepting those who are legally qualified medical practitioners, shall take, or use the name, or title of dentist either alone or in combination with any other word or words, or of dental practitioner, or any name, title, addition, or description, implying that he is registered under this act, or that he is a person specially qualified to practice dentistry, unless he is so registered; and, further, unless so registered or unless a legally qualified medical practitioner, no one can recover any fee or charge in any court for the performance of any dental operation or for any dental attendance or advice. Any one is entitled to registration under The Dentists' Act who is a licentiate in dental surgery, or dentistry, of any of the medical authorities,* or who is entitled to registration as a foreign or colonial dentist; or who was *bona fide* engaged in the practice of dentistry, either alone or in conjunction with the practice of medicine, surgery, or pharmacy on or before July 22d, 1878.

The first statute containing general regulations concerning the practice of dentistry in the state of New York, though dental colleges to which power had been given to issue diplomas to their graduates, had been previously incorporated, was enacted, in 1868, and is entitled An Act to Incorporate Dental Societies for the Purpose of Improving and Regulating the Practice of Dentistry in this State.† This act provides for the organization of the District Dental Societies and the Dental Society of the State of New York, and has been amended so that the president of the latter society is authorized to issue diplomas to persons who have fulfilled certain requirements and passed satisfactory examinations, conferring upon them the degree of Master of Dental Surgery.‡

In 1870 a law was enacted making it a misdemeanor for anyone knowingly and falsely to claim or pretend to have or hold a certificate or license, diploma or degree granted by any society organized under and pursuant to the provisions of the act of 1868, or who should

* The medical authorities empowered to appoint boards of examiners, and to grant licenses for dental surgery, are all such as have power for the time being to grant degrees in surgery, viz.: The Royal College of Surgeons of England, the Royal College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, the Royal College of Surgeons of Ireland and any other university in the United Kingdom.

† L. 1868, c. 152.

‡ L. 1870, c. 331.

falsely or with intent to deceive the public, claim or pretend to be a graduate from any incorporated dental college.*

Other laws have since been passed making it unlawful for any person to practice dentistry in this State for a fee or reward unless he shall have received a proper diploma or certificate of qualification from the State Dental Society, or from the faculty of a dental or medical college recognized as of reputable standing by the State Dental Society;† and, hereafter, every person authorized to practice dentistry within the State must, before commencing practice, register in the office of the Clerk of the County where he intends to locate.‡

The general principles of law which define the duties and responsibilities of physicians, lawyers, and other classes of men whose employment requires the exercise of special skill and knowledge apply as well to dentists.§

The nature of the contract between dentist and patient is like that between physician and patient, and attorney and client; it is a contract of hire;|| on the one hand there is a promise that the party employed will render certain services in a manner suited to his undertaking; and, on the other hand, a promise that the party employing will pay a suitable reward for the services rendered.

On part of the dentist the contract is purely voluntary in its inception, as plainly his profession is not of that public nature which would require him to render his services promiscuously to whomsoever may call for them; but having once entered into the contract, unless dismissed by the patient or the party employing him, or unless he withdraws after having given reasonable notice of his intention to withdraw, the law imposes on the dentist the duty of fulfilling the obligations incident to the contract.

A dentist, like any one else who offers his services to the public generally for employment in a professional capacity, contracts with his employer; first, that he possesses a reasonable and ordinary degree of skill and learning; and, second, that he will use a reasonable and ordinary degree of care and diligence in the exercise of his skill and in the application of his learning to accomplish the purpose for which he is employed.¶

Professional men do not agree to carry the case in their charge through to a successful issue in spite of all contingencies; physicians

* Ibid.

† L. 1879, c. 540. It has been recently held, however, by a court of inferior jurisdiction in the City of New York that a regularly licensed physician and surgeon may practice dentistry without the sanction of the State Dental Society.

‡ L. 1881, c. 376.

§ Elwell, *Malpractice*, 19.

|| Bouvier, *Institutes*, § 1005.

¶ *Carpenter v. Blake*, 10 Hun, 358.

and attorneys are not considered warrantors; nor should a dentist be considered as a warrantor of his work—he never impliedly stipulates for success, at all events. The reason of this rule has been clearly stated as follows: “Where the result desired, as the cure in the case before us, depends both on the skill in the use of means, and the influence of other causes, the law raises no such implied engagement; it regards the undertaking to be only for the use of proper means. The retainer of a lawyer obliges him to the right conduct of the suit, but not for the judgment of the court, for that is beyond his control. The retainer of a physician obliges him to the employment of ordinary medical skill in the treatment of the patient; the cure is not with him. The husbandman employed to cultivate a field is not supposed to engage for the production of an average crop; he may plow and sow, plant and water, but the increase is not with him. The surgeon called to attend a patient with a broken or dislocated limb impliedly engages the ordinary skill of his profession in adjusting it; he is not supposed to engage to cure or to insure a recovery.”*

Undoubtedly by an express contract to that effect a dentist may warrant the success of his work; in such a case the exercise of the utmost diligence and skill will not excuse him should the result be unfortunate, because it was his own fault or inexcusable ignorance that so uncertain a result should have been guaranteed successful.

The advantages which a profession confers are always accompanied with certain responsibilities, and one who publicly announces himself a dentist takes the title *cum onere*. For any injury, therefore, to the patient arising from a failure on part of the dentist to perform the duties which he assumes by his contract he may be held accountable to the former in an action for malpractice. Obviously the wrongs which he may commit in the course of his practice, and which constitute the essential varieties of malpractice, may be included under two heads: First, malpractice from want of a reasonable skill and learning; and, second, malpractice by reason of negligence in the application of that skill and learning.

It may be said to begin with that the question of intention does not at all enter into the problem of a dentist's responsibility—we are speaking of his civil responsibility—nor will it afford any foundation for a plea in extenuation of malpractice. The world at large cannot be expected to inquire into the individual proficiency of every professional man; hence it presumes him to be furnished with that amount of skill and learning which he is under obligation, by virtue of his calling, to possess. The want of ordinary skill and learning on part of a dentist is thus in itself a wrong against a person who employs

* Gallagher v. Thompson, Wright, Oh. Rep. 466.

him, for the reason that it is a breach of confidence, and to that extent a fraud. Negligence, too, is as much a fraud on a patient as want of skill and learning, for it is in fact an omission to continue the use of the means most essential to produce the end contemplated by the contract; and thus, again, there is a breach of the confidence on which the contract reposes.*

(To be continued.)

GET THE BEST.

DR. T. P. WILLIAMS, BELLEVILLE, TEXAS.

Every dentist should keep up with the procession, also keep his eyes open that he may catch all the good things which are said and done and made in his line. I wish to impress the importance of a dentist possessing all new and improved, as well as old appliances, which will assist in improving his skill as an operator. Many dentists have small incomes, and seemingly not able to buy many useful instruments, such as Perry's Separators, Bonwill's Mechanical Mallet, Ainsworth Rubber Punch, the Jumbo Mirror, and the more expensive clamps and matrices. But let me inform all such that it is *true* economy of time and money, as well as money in our pocket, with compound interest. Then there are a great many little devices, which are inexpensive, which will assist us materially in our work, such as Justi's Mouth Prop, Ligature Cutter, different sizes and shapes of plug finishing burs, Teague's depressed disks, small size sand paper disks, and numerous other little things, each used in its place, will do away with the greater portion of hard and tedious parts of many operations, with great satisfaction to ourselves and comfort to our patients. There are cases which no dentist, however skilful, could treat and fill successfully without most of these instruments or their substitutes. If a dentist will invest in improved appliances, he is a saved man and dentist, and well on the road to consummate skill in his profession, there is no doubt of it, because he will undertake operations which he would not had he no such appliances. Possessing the best instruments, his ambition will be aroused; it will cause him to exert himself to put forth every effort to excel. I know this from experience. We sometimes agreeably surprise ourselves when putting on the finishing touches of beautiful gold fillings inserted in difficult cavities, results of an unusual undertaking. It is a fault among many of us to make a compromise between gold and ourselves, on the ground of the new departure, at the same time thinking of the time and labor it will save, and may be it will save the tooth as long as if it were filled with gold. The way to improve our manipulative ability is to tackle the

* Ordronaux, Jurisprudence of Medicine, c. IV.

difficult cavities. Be even anxious to find work that will tax all your resources, and require extra study and skill. It will be worth gold to you.

PRECEPTOR AND PUPIL.

Daniel Nason, Esq., submitted the following forms of contract by request to the last session of the New York Dental Society.

AGREEMENT, Made in the.....of....., County of....., in the State of New York, this.....day of..... 188., between.....of the.....of....., County of....., in the State of New York, party of the first part, and.....of the.....of.....County of..... in the State of....., party of the second part.

WITNESSETH, That..... WHEREAS the said party of the first part by profession a dentist, and duly qualified as such under the law of the State of New York to practice his said profession of dentistry within said State is desirous of associating with himself as a.....the said party of the second part, to the end that he may teach, instruct, and perfect the said party of the second part in the practice and art of said profession of dentistry, and that the said party of the second part may assist and co-operate with him in the practice of his said art or profession; and whereas the said party of the second part is desirous of associating himself with the said party of the first part; and whereas the said party of the first part now has a large and extended practice in his art or profession of dentistry, and many patients who resort to him for treatment in his said art or profession from the region in and about the.....of..... extending to a distance of many miles in all directions therefrom, to wit: to the distance in all directions of about... miles; and both the parties hereto are desirous that on the dissolution of the relationship created between the parties hereto by this agreement, there should be no conflict of interests between the said parties in the practice of their profession or art of dentistry. Now, this Agreement witnesseth, that in consideration of the mutual promises hereinafter set forth and of the sum of one dollar by the party of the first part to the party of the second part this day in hand paid, the receipt whereof is hereby acknowledged, it is mutually promised, covenanted, and agreed by and between the parties hereto.

I. That on the terms and conditions in a memorandum hereto annexed, expressed, the party of the first part will well and properly, in the manner and according to the customs and usages in that respect now practiced in the art or profession of dentistry, teach, instruct and perfect the party of the second part in the art, practice, and profession of

dentistry for and during the period of.....
from the date first above written.

II. That, on the terms and conditions in a memorandum hereto annexed, expressed, the party of the second part will well and faithfully, for and during the period of.....from the date first above written, the said party of the first part assist in, and learn from him, the said art, practice, and profession of dentistry, in the mannner and according to the customs and usages in that respect now practiced in the art or profession of dentistry; and the said party of the second part hereby expressly promises and agrees, that during the continuance of, or upon the dissolution in any way, of the relationship, between the parties hereto by this agreement created, he will not practice or follow the art or profession of dentistry in the.....of.....in the State of New York, or within the distance of....miles from said.....of....., while the said party of the first part shall practice or follow the said art or profession of dentistry in the said.....of....., or within....miles thereof; saving and excepting such time as he, the said party of the second part, may so practice or follow the art or profession of dentistry by the written consent of, and as assistant to, or pupil of, the said party of the first part.

III. That the terms and conditions in the memorandum hereto annexed, expressed, shall be taken as a part of this agreement the same as if they had herein been set forth in full.

IN WITNESS WHEREOF we have hereunto set our hands and affixed our seals the day and place first above written.

.....[L. S.]
.....[L. S.]

STATE OF NEW YORK, }
COUNTY OF.....} ss.

On the.....day of....., 188., before me personally came.....to me personally known and known to me to be the persons mentioned and described in the foregoing instrument and who executed the same, and they thereupon severally acknowledged to me that they had executed the same for the intents and purposes therein expressed.

Memorandum mentioned and referred to in the foregoing instrument.

The terms and conditions of the agreement in the foregoing instrument other than those therein expressed are:
.....
.....

.....

 Mr. Nason: That contract was drawn up by my partner, and I think I can say that there is not a better posted man in the city of New York upon the subject of contracts than he, as he made that subject a special study for some time.

A member: How about minors?

Mr. Nason: That would be a separate form:

WHEREAS, at.....request.....dentist of the.....of....., County of....., in the State of New York, as party of the first part, on the..... day of, 188.., entered into a certain agreement in writing with one.....of the.....of.....County of....., in the State of....., an infant, as party of the second part, whereby among other things the said party of the first part, subject to the terms and conditions in said agreement, agreed to teach, instruct, and perfect, during the period of..... from the date of said agreement, in the art, practice and profession of dentistry, the said party of the second part, and the said party of the second part thereby, among other things, for a like period, and subject to the same terms and conditions, agreed to well and faithfully, the said party of the first part, assist in, and learn from him, the said art, practice and profession of dentistry, and promised and agreed that he, the said party of the second part, would not, during the continuance of or upon the dissolution, in any manner, of the relationship created between the parties thereto by said agreement, practice or follow the art or profession of dentistry in the.....of....., in the State of New York, or within the distance of...miles from said..... of.....while the said party of the first part should practice or follow the profession of dentistry in the said.....of..... or within.....miles thereof, saving and excepting such time as he, the said party of the second part should so practice or follow the art or profession of dentistry by the written consent of, and as the assistant to or pupil of the said party of the first part. Now therefore, KNOW ALL MEN BY THESE PRESENTS, That in consideration of the said.....having atrequest entered into the agreement above set forth, and in consideration of one dollar to..... in hand by the said.....paid on the ensealing and delivery of these presents, the receipt of which is hereby acknowledged held and firmly bound unto.....

..... of the..... of....., in the State of New York, in the sum of..... dollars, lawful money of the United States of America, to be paid as liquidated damages and not as a penalty, to the said....., his executors, administrators, or assigns, for which payment well and truly to be made..... bind..... heirs, executors, and administrators, firmly by these presents.

Sealed with..... seal.... and dated the..... day of....., 188..

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that if....., an infant, hereinabove mentioned and described, shall well and truly perform, according to the true intent and meaning thereof, all the agreements and promises by him, in the said agreement hereinbefore mentioned and described, agreed and promised to be performed, then the above obligation to be void, otherwise to remain in full force and virtue.

Signed, sealed and delivered in presence of

.....[L. S.]
.....[L. S.]

STATE OF NEW YORK, }
COUNTY OF..... } ss.

On the..... day of....., 188., before me personally came..... to me personally known and known to me to be the person mentioned and described in the foregoing instrument, and who executed the same, and..... thereupon..... acknowledged to me that..... had executed the same for the intents and purposes therein expressed.—*N. Y. Trans.*

DISCOLORATION OF AMALGAM.

EDITOR ITEMS: I regret that what I have written on this subject should have been so completely misunderstood. It was the discoloration of amalgam *in the mouth* I discussed. The fact I incidentally mentioned, *one of several* cases of soiling the skin when an amalgam is mixt in the hand, is by no means a proof that no *other* cause was supposed to exist.

The very unsatisfactory method of mixing in the hand has been discarded for years by most, if not all, operators who do the best class of work, and has been replaced by the much cleaner and quicker one of shaking the mercury and fillings together in a long, narrow glass tube. When the alloy and mercury have been sharply shaken together for a few seconds, the mixture is placed in a cylinder mold and formed into discs, which are placed in the cavity and packed with the greatest ease.

THOS. FLETCHER.

Warrington, England.

EVOLUTION IN TOOTH CROWNS STILL PROGRESSING—PORCELAIN TIPS, FILLINGS, ETC.

DR. S. DAVIS, D.D.S., DENVER, COL.

All dentists understand the advantages in fitting tooth crowns to roots of teeth by having each piece separate, viz., the facing band and pin, and it is also desirable to have those pieces in one solid piece before cementing to the root, leaving no place for secretions, and having a strong substantial crown. 1. Adapt the band or ferule to the root. 2. Take a plate tooth (without backing), grind the cervical portion to fit over the band, neat with the gums. 3. Place the pin in position, close the pins in the plate-tooth to hold the pivot pin; back up with wax to hold the band and plate-tooth; remove all from the root. Mix some fine powdered glass with water and work in between the gold band and crown; invest the same as for soldering. Remove the wax, bring all to a red heat, select a piece of white or opaque glass, about the size of the wax removed, fuse with the blow-pipe, and, while in a molten state, press in to fill the space left by the wax; when cool, grind with a corundum stone to the desired shape, and polish with a pumice-stone on a felt wheel. This is a practical crown, equal to any crown with the pin baked in.

Another way to make a fine crown. Take the old wooden pivot tooth, cut a slot into the pivot hole on the lingual surface, band it, fuse the pin and band into one piece.

Procelain tips for natural teeth, fillings, etc.—After fitting properly, make holes with a diamond drill, place some of this compound around the pin, fold in a piece of asbestos paper, and fuse with the blow-pipe. Pins broken from artificial teeth can be replaced by this process equal to those baked in.—*Western Journal*.

Where do Teeth Decay?—When a dentist examines for cavities in a mouth which he has never seen, he looks in three places only: It is where the enamel dips down and forms a deep crevice, —either sulci in the top or the side of a tooth,—or makes a dimple somewhere there is no business to be a defect; he looks between the teeth, just below or above the point of contact; and he looks at the little creases near the margin of the gum. He need not look anywhere else. Why? Because the act of mastication and talking will generally keep the food from lodging on other portions of the teeth. And where no lodgment of food takes place, and the health of the patient does not cause excessive acidity of the oral fluids, there is no decay of the teeth. I know a man, fifty-three years of age, whose teeth are perfect in form and arrangement, though they never

have been brushed; only one cavity, and that was where a dentist had used a file. He has simply washed them with water after every meal, yet he has a clean mouth. Now, some of you may remember a skull which I showed you, of a child six years of age, where the twelfth-year molars were not erupted, and yet all four were carious; cavities that no human power other than a filling for each could have prevented from involving their speedy and entire destruction had the child lived. No possible brushing could have kept them clean.

The Sympathetic Dentists.—The dentists who have been holding their annual meeting in this city have received much useful advice from the officers of the association and from those appointed to prepare papers on special subjects. They have been told to get out of the ruts and bogs and shadows, that their sympathies may be enlarged and their appreciation of humanity deepened. But nobody seems to have touched the subject about which dentists most need instruction. Nobody has urged them to rise to an appreciation of the value of their own work and to charge sufficiently for jamming fillings into teeth. The dentists have too wide and deep a sympathy for humanity, as it is; they need rather to consider their own interests. They don't seem to care a rubber dam for money. We have known dentists to charge only as much as a man could pay without putting a mortgage on his house. They don't do justice to themselves.

“We know that dentists make more money than doctors, lawyers, or preachers; but that is no standard. The profession of dentistry requires a larger intellect, in the hands; it is one of the learned professions, like watch-tinkering and umbrella-mending. Your watch-tinker will charge \$3 for blowing an imaginary bit of dust out of your watch, when the only trouble is you have forgotten to wind it. He is worthy of his hire. So is the dentist. Even more, for he has to bear the spectacle of your suffering, which touches his sympathetic nature and is worth \$2 a suffer. Then he has to run the risk of the filling coming out, and should charge for the hurt this is to his feelings. The dentist, in the simplicity of his heart, appears to think that when he has fixt up a man's teeth he should leave him enough money to get an occasional meal and not take all he has. It is a mistake, though an amiable one. The man who has been through the dentist's hands never cares much about eating again. The dentist should have a military training in which he will learn to charge. To charge not only for the work he does, but for his suffering, in the way of sympathy. His sympathy for the pain he inflicts is bad enough, but there is the still greater sympathy for the patient's pocket.”—*Milwaukee Sentinel*.

PROGRESS, OUR WATCH-WORD.

We are not here to merely transmit the intellectual and moral and physical world to our successors, as we received it. We are to do more than to think, teach and act as our fathers did. Granted that they were faithful in their generation, yet they could not do our work, nor work we should be satisfied in doing; they could only do their work, not ours. We have a work in advance of theirs, for we are in advance of them. If we make no improvements in their works and way, we are hardly above the dove that finds this year just such a nest as was built by the dove of the first creation.

Let us be thankful for all our fathers have left us they are precious treasures, but let us continue their work, and leave it much more perfect to our children than we received it from our fathers.

That Dangerous Case of Anesthesia.—EDITOR OF ITEMS OF INTEREST: Dr. J. W. Jay in this month's ITEMS gives description of a case which is very unsatisfactory. I understand Dr. Kelsy gave ether to the patient and Dr. Jay extracted two teeth for her, all in less than three minutes. Then follows the frightful condition of their patient and the frightened condition of the M. D. and D. D. S. But after one hour of hard work and anxiety the patient again breathed natural and finally walked home.

Dr. Jay says that less than three ounces of Squib's ether was given, so it is fair to suppose that two ounces or more were given. How this amount of ether could be administered and the teeth extracted inside of three minutes I cannot understand. I don't wonder at the condition of his patient, as one-third ounce of ether or one-fourth ounce of chloroform is plenty for any such minor operation as a general thing, and especially in anything like the short time specified. I think Dr. Jay's article is calculated to frighten and mislead those who have had little experience with anesthetics.

C. H. GILLMAN.

Valley Falls, Kan.

Made to Testify Against a Dead Criminal.—Dr. Stewart of Detroit was compelled by the court to state when, where, and for what he had treated a dead criminal. The prosecuting attorney was peremptory in demanding an answer from the witness. He said that the law did not recognize medical ethics to the extent of concealment of crime, and Dr. Stewart was bound to tell when, where, and for what he attended the dead man; but if the man were alive he need not tell what the man said if what he said would criminate him; but the man being dead, it was the doctor's duty to aid the cause of justice by telling all that passed between himself and the burglar.—*S. Cal. Practitioner.*

The Glands.—The functions of glands are among the most interesting and most important of the organic processes. They rank next to the vital organs in importance, and any interference with their functions is serious.

They are numerous, and may be divided into the true glands, the lymphatic or conglobate glands, the ductless glands. Names are intended to be expressive of the quality of a thing, or function of an organ. If this rule had been followed in the naming of the different glands, none but the true glands would have been entitled to the appellation of gland. But they were all called glands before their respective functions were understood, and having once found place in our literature under this name, it was not advisable to change the names of any of them, but to designate them according to their respective functions. Certainly those organs which elaborate and give forth all the amazing varieties of animal juices, which, notwithstanding their variety, are all drawn from the same source, should be called glands. These are the true glands, and though the microscope shows scarcely a difference in the form and structure of the cells composing their tissues, yet the diversity of their secretions is something marvelous. There is no saliva in the blood, no gastric juice, no milk, no semen. The elements of these substances, even to the life spirit of the seminal germ, are in the blood, but the secretions themselves are elaborated in the glands by a cell action peculiar to each variety.—*Dr. C. W. Spalding.*

Prominent Cuspid.—MR. EDITOR: In answer to R. P. Smith in ITEMS concerning prominent cuspids, I would say the case mentioned can be entirely corrected without much pain or inconvenience by constructing a rubber plate with the molars and second bicuspid covered, on the outer section of the plate extending along the borders without displacing the muscular attachment, insert steel springs, "*tinned*," and set to the tension necessary to press the cuspids to their proper place. If desired an increase of thickness of the plate at the palatine surface of the centrals and laterals may be formed and small pegs inserted to make the arch perfect. In one or two weeks these teeth will be in place.

Turn the ends of the spring wire to form a loop laying flat on the lingual surface of the tooth.

GENESE.

If, in running your engine, so much friction is created as to cause the cord to slip, get two rubber bands for five cents, stretch one over the wheel of your engine, save the other for future use.—*Thos. P. Williams, D. D. S.*

LETTER FROM AN OLD MAID.

Editors Southern California Practitioner.—*Gentlemen*: I notice on page 272 of the July issue of your journal that one of your numerous editors growls about his cooking, and says, "Women should spend more time learning to conduct a house, and less screeching, 'Drink to me only with thine eyes.'"

Now, I know nothing about the personnel of your corps of editors; but I would be willing to wager a fountain syringe against a half pint of Laplace's sublimate solution, that the editor who wrote the above is a bachelor, and that he has been housekeeping.

In my opinion the chief cause of indigestion is the rapidity with which men bolt down their food. Nine men out of ten eat as though they had but ten minutes for refreshments and were afraid the train would leave ahead of time.

SAN DIEGO, CAL.

MARY J. S——, M. D.

A Wonderful Germicide.—A simple germicide prepared by Dr. J. D. Fernandez is very efficacious. It is a composition of sodic hypo-sulphites, diluted sulphuric acid and spirits of lavender, and it is certainly most beneficial. Mr. Dillon, before he was first taken ill, directed the doctor to prepare something for the telegraph operators. The doctor prepared this, and the telegraph operators have been using it regularly now for four weeks or over. Half a teaspoonful, night and morning, is the dose. Since then not a man in the operating room who has used this germicide has been taken sick. The telephone operators in the room over the telegraph office, by some misunderstanding, did not get any of the germicide, and all but one have been taken down. Two of the clerks in Mr. Dillon's office failed to take it, and they are both ill. Mrs. Dillon arrived here from Pablo on the day that Mr. Dillon was taken ill, and she nursed him through his sickness, being by him all the while. She took the germicide regularly, and hasn't been troubled with yellow fever at all. D. J. Crowley, manager of the office, nursed his wife during her sickness until her death, using the medicine punctually, and he escaped the fever.—*Jacksonville Despatch to N. Y. World.*

Detection of Concealed Insanity by the Use of Nitrous Oxide.—Hamilton relates cases in which patients, who carefully concealed their delusions, were made to display them fully while under the influence of nitrous oxide. He believes the gas to be very useful, also, as a therapeutic measure in various mental disturbances, by effecting a diversion of morbid thought, or a temporary suspension of memory.—*S. Cal. Practitioner.*

The Students' Society.—*The Students' Society of the New York College of Dentistry* was organized in November of 1887 by a few junior members of that college. It is now approaching the beginning of its second year of existence with every prospect of usefulness and success.

Its membership, both active and honorary, now includes upward of one hundred, while new members are being constantly received.

The society gives the student opportunity for comparing with his fellows ideas and methods; trains him in accurate and scientific statement of facts; and by the feeling of equality permits him to freely advance and meet arguments and theories; thus, in many ways, preparing him more fully for an active professional life.

E. H. BABCOCK, *President*.

Prosecution of American Dentists in England seems to include not only the incompetent, but all whom the English dentists do not choose to count in their professional association. Two have been lately prosecuted, though they were able to show their diploma—the one from Pennsylvania University, and the other from the Boston Dental College. The only two American Colleges recognized in England as competent to issue dental diplomas are the Michigan University and Harvard. This is invidious.

Our Speling.—At a banquet at Pictau, N. C., on the ocashun ov opening a railwa, Prof. McKa, ov Pictau Academy, a leading sientist, and President ov the N. S. Sumr School ov Siens, sed: "I want to se a railwa thru our speling sistem. It is a sistem not based on felosofy, lerning or enything else. I want to se a railwa thru our wates and mesures, and a railwa thru our riting, which is five times longer than need be."—*The Herald*.

In one of Bishop M'Tyre's Baccalaureate sermons he says: "I was once in a furniture shop. Lying on the floor I saw several pieces of timber. Speaking to the foreman of the establishment, I said: 'Why do you not use this? It is of fine grain and very beautiful.' The foreman said: 'Yes, we have plenty of that, but we cannot use it. It is too soft to be polished.' Young men, if you are too soft to be polished, God will put none of it on you." Yet the softest are often the most vain, supercilious, and pretentious.

ED. ITEMS: Will you please inform me through the ITEMS of the best treatment for discoloration of gold fillings, and oblige.

"S."

For Our Patients

God give us men! A time like this demands
 Strong minds, great hearts, true faith and ready hands;
 Men whom the lust of office does not kill;
 Men whom the spoils of office cannot buy;
 Men who possess opinions and a will;
 Men who have honor; men who will not lie;
 Men who can stand before a demagog
 And scorn his treacherous flatteries without winking—
 Tall men, sun-crowned, who live above the fog
 In public duty and in private thinking.

—DR. J. G. HOLLAND.

FREE ADVICE TO DOCTORS.

A BURLESQUE.

[Henry Guy Carleton addresses the coming Medical Congress.]

In some inexplicable manner, the invitation of the Executive Committee for me to read a scientific paper before the Medical Congress which is to meet in Washington next Tuesday has either been misdirected or has gone astray. Under ordinary circumstances I might feel slighted, but the warm interest which I take in the Congress and my desire to have it hear something really worth remembering have prompted me to overlook the accident, and I have prepared the following hurried but valuable monograph on Medical Ethics, which I trust will be read immediately after roll-call and prayer, by the Chairman, Dr. Louis A. Sayre.

It appears to me, brother delegates to the Medical Congress, that our earliest attention should be diverted from etiology, semeiology, sequelæ, prodromata and pills, and turned to the long-neglected question of Medical Ethics.

The ponderous code which has hitherto been in use, and which has often been the cause of elaborate trouble between medical brothers, leading to large ecchymoses under the eye, hæmorrhagic nasal turgescence, spinal relaxation and periostitis of the tuberosities of the ischii from pedi-phalangeal shock—this code, it appears to me, should be revised. I have formulated roughly a code which, no doubt, you may in time slightly enlarge and perhaps modify. I take first the duty of the physician to his patient; second, his duty to himself; third, his duty to his brother physicians, and fourth, his duty to the public.

The duty of a physician to his patient is divided into three parts. First, call and diagnosticate the case. I venture to draw your earnest attention to the fact that I place diagnosis before treatment. There are many of us who skip the diagnosis in our hurry to get in our fine treatment, and we postpone investigation, knowing that we can do it more

leisurely at the autopsy. Of course, it must be admitted that a post-mortem generally throws a surprising amount of light upon a case, but with patients and their families I have discovered that the prejudice runs in favor of diagnostic investigation.

You are perhaps surprised at the importance I attach to diagnosis, but I assure you I have seen evil results follow from mixing up diseases: treating a man for glanders when he had a cinder in his eye, and ransacking his interior by laparotomy when he merely had a plain, straightforward, Christian case of snakes.

Looking at your patient's tongue, feeling his pulse and getting his five dollars is not always sufficient diagnosis, particularly in the early stages of a zymotic or the last stage of desquamatus degeneration of nephritic tissue. In some cases, hammering him on the back, drumming on his brisket and running over his cardiac region with your right ear will at least restore public confidence, if it does not give you any hint of the mystery within. I have also found that a diligent inquiry into the history of the case often assists diagnosis by eliciting the opinion of the household.

I divide diagnosis into two classes—analytical and synthetical. In analytical diagnosis you form a correct opinion by your examination into, and knowledge of, the symptoms. In synthetical diagnosis you don't exactly know where you are, but you don't let on. You give one drug and watch results. If the patient improves—why, there you are. If he doesn't improve, but sinks rapidly, change your drug for its antidote, and you have earned your money. Most of us prefer synthetical diagnosis. It is easier, and we come more quickly to the autopsy, which, after all, is the old reliable method, and can't well be improved upon.

When you are in doubt that your diagnosis is correct, call for a quiet consultation and send for one or more eminent physicians to examine into the case. This shifts the responsibility entirely from your shoulders and enables you to attend the obsequies with a light heart.

It is better in consultation to call in a physician of your own school. I once had a case I didn't exactly understand, and two hours after I had begun my treatment the patient sank into a sweet deep coma and was rapidly cashing in, when I sent for the two nearest doctors for a consultation, happening to be a stranger in the town. The first was a homœopath, and of course had never seen a human interior, and the second was a faith-cure specialist, whose whole pharmacopœia was a hallelujah and a rise up William-Riley sort of a manner, which jarred upon my nerves. I received them courteously and laid before them my diagnosis. I said that the parenchymatous nephritis had given way to cachexia, complicated with idiopathic nepatitis, some angina and

cerebral tuberculosis, which, however, I had passed over as minor sequelæ, confining my treatment more to the anasarca in the left foot and the ecchymosis under the right ear. Mitral regurgitation, aphasia, locomotor ataxia and opisthotonos had been marked during the night, I said, with orchitis of the ventricle, valvular cystitis and some paraphimosis of the dura mater, which I had quieted down by frequent ten-minim hypodermies of aconite until hemorrhagic balanitis supervened. I then paused for a reply.

The homœopath sat in silence a few moments and then inquired if my patient, who was a large, irritable man, had ever had membranous croup, and did puerperal fever run his family? I said briskly that no symptoms of either had been present. Then he said that two pellets of *carbo anamalis* every four hours, with a trituration of *mercurius*, ninth power, every forty-two minutes, would, he thought, relieve the more prominent symptoms, and the patient would certainly live unless he got in a moribund condition, which might prove fatal. Excessive moribundity, he said, had been the principal cause of death in most of the cases he had handled. He then said that forty dollars would about fit his own private symptoms, and I left the room to introduce him to the afflicted relatives. We heard four thumps, a whiz, and a dull thud, and rushed back just in time to learn that my patient had thrown the faith-cure doctor out from the oriole window, and I had a double case of coroner before I left town.

I find the best average diagnosis is to find out if my patient is suffering any pain. If he is, I either chloroform him and cut out the painful part or shove into him about sixteen minims of Magendie's solution with a hypodermic syringe. Hypodermics of morphine always stops the pain, and when he dies happy what more could be expected? You will always observe that a doctor who favors synthetical diagnosis will squirt morphine into the arm for everything from a gum-boil to diffuse typhoidal peritonitis. Then he administers three grains of quinine three times a day, and sends in a bill for sixty five dollars.

The duty of a doctor to himself lies more in the financial than in the medical side of the question. I always, in my private practice, administer an anesthetic, and, while my patient is unconscious, help him to pay me out of his trousers' pocket, or else I secrete some portable article of property about my clothes, and return it if he gets well and comes up to the scratch. What the profession really needs is a chattel mortgage, which will levy on all the furniture in the house, and which the patient must sign before he takes the first pill, and I earnestly commend this simple process to the attention of the Congress.

The duty of a doctor to his brother physicians, as defined by the old code, is to pronounce them all murderers in the first degree. The

old code has established among physicians the same beautiful harmony which we observe in tomcats.

A doctor must not prescribe for another doctor's patient, even if said patient be dying and said other doctor be drunk. His clear code duty is to sober up the other doctor, and slide out with a polite but firm adieu to the hysterical family.

A doctor may spend his time inventing new surgical appliances or ascertaining new remedies; but he must give their free use to all other doctors, or they will be justly entitled to both use his inventions and call him a quack. This legitimatizing of piracy and blackmail is, I think, a beautiful and just feature of the old code, which should be preserved.

A doctor may blister his house all over with a roseola of shingles, according to the code; but if he advertises he is a felonious impostor, who should be socked in jail. His best way of advertising is to marry a rich and eloquent wife, who will race around and give all the other doctors rats in society, while he reclines in his office with cerebral elephantiasis and prepares to accommodate the fashionable rush.

A doctor should never send a crippled eye, a lame ear or a warped spine to a specialist until he has tinkered with it himself for at least a year. The thing will then be chronic, the specialist will be able to do no good, and the doctor can safely say that specialism is all very well, but give him general practice every time.

A doctor should never write a legible hand, particularly when prescribing morphia, digitalis, veratrum viride, aconite, atropia, hydrocyanic acid or arsenic. The more obscure the doctor's writing the more latitude will be given the sleepy clerk who puts up the prescription. Whenever I exhibit any of these little, soothing family remedies I always write the prescription so I cannot read it myself, and then the pharmacist exercises his own judgment, and just mixes up some assa-fœtida and squills, and I get there brilliantly with the sufferer and please the family. This simple rule has got me out of more altercations with the Board of Health than anything I can name.

Doctors are always courteous with each other. When a number are called in to attend a rich and powerful patient, they always exhibit a synchronously mutual respect and brotherly love, which inspire the public with confidence and respect.

These few little hints, gentlemen, may inspire you to formulate a code more in accordance with modern progress than that conceived in the days of the bolus and yarb tea. If base ball were not so active I would be with you; but I shall be glad to receive any prepaid telegrams of inquiry while you are in session, and will wire any advice, collect, which I may think will fit your case.

HENRY GUY CARLETON, M.D., Ph.D., D.D.S., etc.
(Faith Cure a Specialty.)

Editorial.

WHAT SHALL BE THE LANGUAGE OF THE FUTURE?

☞ Most of us are too conservative to favor any radical changes in our language; we are still more reluctant to harbor any idea of a new language.

But really, is not the adoption of new words so much a new language? The only thing that reconciles us to the innovation is that we capture these words, instead of these words capturing us. They would capture us if they came so fast as to become a prepondering power. But as it is, they come so quietly, so slowly, and so opportunely, that we welcome them, instead of being afraid of their intrusion. Yet, there is scarcely a month that some word is not introduced to express some new thought, invention or combination. They seem awkward at first; but we soon roll them under our tongue as sweet morsels, and then roll them off our tongue as sweeter sounds.

The trouble is, in all this effort—this spontaneous, matter of course invasion and adoption of new words—there is no system. It is at the caprice of every man who thinks he has something in science or in mechanics, in the professions or in the trades, that needs a new expression, and who can succeed in making others believe it. Like our spelling, there is, in many of these words, no form nor comeliness. And yet, as there is no authority to which to appeal, new words drift into our language, whether appropriate or inappropriate, ugly or comely, in harmony with our idiom or not. It does sometimes seem as though the longer and more outlandish the new words, and the more awkwardly spelt, the better they are received.

Our friend, Dr. Wm. H. Atkinson, of New York, has attempted a new nomenclature of professional terms; and, during his research for roots and fundamental terms, has been drawn into the conviction that human language needs radical and scientific reconstruction. Many of his propositions are laughable, and some of his words are worse than Greek or Aborigine; but all this may be only in the seeming. At any rate, it is an encouraging effort, inasmuch as it attempts to give us a language of method, words in themselves significant, and even sounds that are not only the roots, but the abstract, independent and absolute signification of ideas.

“Alwato,” by S. P. Andrews, of New York, is a still broader effort. He attempts an entirely new language, basing the representation of ideas on a methodical representation of sounds, and these sounds by characters also of fixt representation.

“Volapuk” is another commendable effort in this direction.

C. E. Sprague is its best American representative. He gives us a glimpse of the system in the *American Magazine* for June. The attempt is not to supercede present languages, so much as to present one that shall be an accompaniment to all, and so easily learned that any one of any pretensions shall become familiar with it. Though Mr. Volapuk, from whom this system derives its name, is a German, he finds the English language so rich, pure and simple, that more than half his words are derived from it. "The prepositions are generally dropt, and a, e and i added to any noun to form its genitive, dative and accusative. The whole grammar can be learnt in an hour. A dictionary of 12,000 words has been compiled, and there are eight monthly periodicals printed in Volapuk."

ADVICE TO MY SON SAMUEL.

Yes, Samuel, it is easy enough to be rich and honorable and useful and happy ; just as easy as it is to be poor and dishonored and useless and miserable. It is generally within ourselves to decide our destiny. My son Samuel is deciding his destiny now. It is only to see him wandering about listlessly, aimlessly, thoughtlessly, to predict a future of uselessness.

My son, you may even learn your books, yet know little. You may have good clothes and strut about as a coxcomb, putting on all the airs of a dude ; yet have no valuable thoughts, no mental and moral discipline, no depth and breadth and strength of manly capacity.

My son, Samuel, if you would rise in this world, it is not what your father is, or what your ancestry were, that will give you permanent place and power among men ; but the intrinsic capacity of a well-trained brain, brawny muscles and skill in the adaptation of means to ends.

The Saliva, in its healthy state, is always alkaline. It is rarely eliminated from the blood, or thrown from the salivary glands, in an acid state, even in sickness. A dyspeptic, with a fearfully acid stomach, and with acid eructations, has generally alkaline saliva. Sometimes the mucus from the mucous follicles of the mouth is acid, and this imparts acidity to the saliva, and occasionally such acidity is produced by decomposition in the mouth of epithelium and salivary corpuscles, and by fermentation of food on and between the teeth. Neither of these causes, however, should be laid to the charge of the saliva, and they are nearly always preventable, and generally counteracted by the alkaline power of the saliva, unless in confined places out of its reach. It is for this reason that many have good teeth who never brush them, or even remove foreign substances from between

them. Often, however, if such decaying substances are left to ferment, and to thus produce acetic acid, they injure the teeth in spite of the alkalinity of the saliva. Still more injurious is the nitric acid from decaying meat.

DO ALL AMALGAMS SHRINK?

One of our popular writers says they do. This is as great a fallacy as his assertion "that there is little difference in amalgams; they are all made very similiarly." There is as much difference in amalgams as in gold foils, and this is saying much.

We are aware that many amalgams shrink; but we are also aware that an amalgam may be so made as to expand. Why then may not the proportions of metals be so adjusted that the compound will neither shrink nor expand? That this has been the aim of many manufacturers is without question, and that some have attained this end there is no doubt.

The fact is "the trade" is in such a wretched condition that the demand for a low price is constantly tempting the manufacturer to debase his compound without regard to the result. The same author from whom we have just quoted says: "Thirty-five or forty per cent of silver with sixty to sixty-five per cent of tin makes just as good an amalgam as any of the more expensive; and, therefore, it matters but little what amalgam a dentist uses." Accordingly, men are found reckless enough to make such a compound, and by giving it a high sounding name, and agreeing with their dealers to give them a half of the gross returns, the profession is flooded with it, and the only boast is that "It is offerded at a remarkably low price."

Then comes the anathemas against all amalgams: "I filled teeth for Judge Story's wife only two years ago, and now they are a wreck. Don't tell me amalgam wont shrink. I have now demonstrative proof that it will shrink, and that the edges will break away, and that teeth are ruined by it."

Babbitt Metal—This is probably the best compound for dies for dentists. But the formulas given are not uniform, and some do not give satisfactory results. Dr. Haskill gives the following, which is, perhaps, the best for dental purposes: 1 part copper, 2 parts antimony, 8 parts tin. These should be melted in the order given, as the tin would oxidize badly before the copper was melted, if all were put in the crucible together. As a strong heat is required, it is well to use a furnace or a blacksmith's forge. Melt and run off into ingots and then remelt. If this does not run freely from the ladle when making a die, add some tin. This formula for Babbitt metal gives a compound that is non-shrinking, hard and cohesive, fusing at a low temperature and giving a smooth surface.

HOW TO BE SUCCESSFUL.

1st. *Love your work.* Few succeed who find their employment a drudgery, or who, for any cause, go about it with reluctance or from a sense of mere duty. We cannot hire ourself to it as a servant ; we must be married to it, making it inseparable with our very nature, "to love and to cherish, so long as we both shall live."

2d. We must give our business *our chief thought*, our steady, sober, earnest study. Too many rush into a business as mere enthusiasts. There is not sufficient intelligence, prudence, and careful forecast. They attempt to leap into experience and success, instead of taking orderly, well-measured steps. He who would permanently succeed must be discrete, studious and even scholarly ; so thoughtful, deserving and bent on improvement, as to make each day's work a lesson learned for the next day's better practice.

3d. There must be continual development of *skill*. This is more than thoughtfulness, intelligence or any of the results of mere brain work. It is more than knowledge or even wisdom. And though it is the chief characteristic of the genius, it may generally be attained by the dullest manipulator, if these other qualities are persevered in.

4th. But all these will fail without *energy*. If you would be successful set yourself on fire ! Determine to go through the world a blazing torch ! It is possible to over do, especially during the first flush of a new position. As was said of one of our ex-presidents, who died soon after his inauguration, "He heated and he died." Though few die from over work. Most do not accomplish much, not because they lack ability, but because they lack enthusiasm,—the inspiration that makes us a charged battery.

5th. It is quite as important to have *persistence*. Many of us get too easily discouraged. We must have zeal according to knowledge—a zeal so tempered, directed and maintained by intelligence as not to be evanescent. Our charged battery becomes too soon exhausted, our blazing torch is made of too light material, our force is spent in ebullitions, not in growth. It is dogged perseverance that wins, feeling or no feeling, work or no work, friends or no friends, money or no money. Conquerors are men who do not know when they are beaten, or who turn defeat into victories ; men who, instead of pining over failures, make them lessons for success ; men to whom obstacles are a delight and impossibilities an inspiration.

6th. And yet, to all these fine qualities there must be added *integrity*. Without this to give foundation and solidity, to govern and intrench, to impart confidence and esteem,—the accumulation of money, or even of position and popularity, is the shell without the meat, the

beautiful house without the home, the appearance without the substance, "vanity of vanities."

7th. And there must be *frugality*. Ample gathering is vexacious, if it brings extravagance and waste, dissipation and artificial wants, worry and exhaustion. City dentists whose yearly income is from ten to fifteen thousand dollars, who live and spend extravagantly to keep up appearances and to meet increasing indulgences, are worse off than modest country dentists with from one to five thousand dollars a year, who are contented with moderate surroundings and enjoyments, and who are healthy in their living and ambition. With all of us, true wealth is not so much great income as great contentment, harmony and restfulness in an ample fulness of supply for our needs (not our wants), with that treasure of carefulness and frugality which give discipline to our passions, appetites and desires, and ensures health of body, mind and spirits, with pleasure, usefulness and competence. And even the aggregate of our possessions does not depend so much on the amount we receive as the amount we save. Many men earn enough to become rich in a few years; but the more they earn the more they spend, even if they have to throw away much of it on foolishness. All gains without frugality is like washing gold bearing sand in a sieve. The precious metal is there, we see it, we feel it, we handle it, for a moment it is ours; but it does us no good because we cannot retain it. We see it sparkle, but we wash it all away with the worthless sand; we handle it only to throw it away.

Reader, try our plan for a few years and test the result. Abandon extravagance, either to keep up appearances or in pernicious or wasteful habits; change your sieve for a pan; in all your ways be guided by strict integrity; be persistent and constant in your zeal for business; see that every operation is done so thoughtfully, delicately and exactly as to increase your skill; and above all, love your work. If the result does not give you increasing contentment and happiness, and final competence and satisfaction, charge your disappointment to your humble servant. But don't fail to try it, *and commence now*.

A Missionary Training School.—The present is developing improvements in every sphere. This Missionary Training Institution is one of them. Heretofore, too many good men and women have been sent to the heathen more because they were good and self-sacrificing than because they were fitted in character, education and adaptation for their work. To be a successful missionary, there needs stamina, training and aptitude that are not possessed by all, even good people.

This institution, situated in Brooklyn (corner Raymond and Willoughby), is intended to sift the good from the bad, and to give the

acceptable a thorough training by practical work in city missions, and a varied course of study before they are sent to foreign fields. By this means there will be less failures abroad, and less expense to missionary boards; and those who have all the qualities for success will be greatly helped.

To Reduce Fat.—Some dentists, and others, are really inconvenienced by a redundancy of fat. It is not always from laziness. It may be constitutional, though laziness is constitutional with a few.

The observance of two things will generally reduce the weight without injury to the health. 1st: eat less, and that of plain, simple food. Most of us eat too much, and that of a too concentrated or rich character. 2d: exercise much. Not at mere play, but at good, honest, hard work. If you have no work to do, and can find none, walk six or eight miles a day.

Disagreeable medicine you say? Medicine is generally disagreeable. To attain any desirable end, we have generally to pay its price. The very fact that you shrink from such work, and from this little sacrifice in food, shows that you have been over-indulging yourself. Do you know how hogs are fattened? But a horse is kept in "good condition" by being vigorously employed; by being left in the barn and highly fed he becomes too fat for health, strength or profit.

The Publishers of the Items of Interest are anxious to perfect, as far as possible, the list of subscribers for 1889 *before the year commences*. As a stimulus, they offer to send the December number free to those who will send in their names immediately.

Both this year and last, so many new subscribers came late that our reserved ITEMS became prematurely exhausted. Please, now take time by the forelock, and it will much convenience the publishers. We do not object to the rush of new subscribers; (they have been one quarter as many as the old, each year for three years); but let it commence a little earlier.

Of course we are anxious to retain our old friends. Heretofore we have asked for their formal renewal; but so few have left us, and so many have felt offended because their ITEMS was stopt by their inadvertent neglect to inform us to continue, that this year we shall continue all who are now on our list. We certainly thank our friends for their uniform good will and support. And we shall try to make the ITEMS as much better next year as our past experience will enable us to do.

Subscribers will see on their envelope the date of expiration.

To Make Gutta-Percha Stick to the Walls of a Tooth Cavity.—Drop the plug to be inserted in the tooth, into any of the essential oils.

Miscellaneous.

A Snake in his Stomach.—"Prof. Wyman, on entering the office of his friend, Dr. Augustus A. Gould, an eminent Boston physician, was asked his opinion about a curious case. His friend, a clergyman, had just brought in an animal which he said a worthy parishoner of his, a man of unimpeachable veracity, after some years of suffering in his stomach, had recently vomited while sitting on a rock in an open field. The animal tried to escape; but was caught. Prof. Wyman at once recognized it as a young blacksnake, which could not have lived years in a man's stomach and then been vomited. The clergyman indignantly denied that his worthy parishoner could be mistaken or would deceive, and wanted to argue the case. The professor said he would not waste time in dispute, and with his pen-knife immediately opened the reptile's stomach and turned out some grasshoppers, beetles and other remnants of the usual food of such animals. He said to the clergyman: 'It seems that your parishoner has a liking for a peculiar kind of diet.'"—*Popular Science Monthly*.

Vanderbilt and His Father.—The son was then thirty-two years old, and himself a father. They were on board the steam-yacht Northern Star, on their way to St. Petersburg. William, who was an habitual smoker, was puffing his favorite cigar. "Bill," said the Commodore, "I wish you'd give up that smoking habit of yours. I'll give you ten thousand dollars if you will."

"You needn't give me anything," was the son's answer, as he flung the cigar overboard. "Your wish is sufficient." He never smoked afterward.

Would that more of our young men would follow his example.

Sure Death to Buffalo Moths—A lady correspondent sends us the following: Take strips of red or blue flannel (as these colors are particularly attractive to them), dip in liquid arsenic and lay around the edges of carpets, or wherever the pests are troublesome. They will soon eat the desired amount and collapse, to the entire satisfaction of the housewife, without the least injury to her carpets.

Gold Solution and Gilding.—Dissolve the gold in *aqua regia* (one part nitric to two parts of muriatic acid); evaporate nearly dry; dilute with water; precipitate the gold with aqua ammonia; take up the precipitate with cyanide of potassium, $\frac{1}{2}$ oz. to 1 dwt. of fine gold; filter clear; the plate to be gilded is first to be polished and washed perfectly clean; after washing do not touch it with the fingers; put it in the fluid and place a strip of zinc against it; when coated with the brown precipitate remove, wash, and polish. This process may be repeated several times, until the desired color is reached.—*Western Journal*.

Bill Nye was invited to attend the banquet of the Indiana State Medical Society, but being unable to be present, sent his regrets in the following characteristic telegram:

It is impossible for me to be with you. Hope you will continue to take life easily.

BILL NYE.

How to Keep a Bouquet Fresh.—A queer way to keep a bouquet of flowers fresh, but a very striking and effective one, is thus described: In a vessel of water place a plate, and on this stand a bouquet of flowers, weighted at the bottom so as to stand upright. This being done the bouquet is covered with a bell glass, the rim of which ought to fit exactly the flat part of the plate; the bell glass should be entirely filled with water, and without the least air bubble. Then raise all together, bell glass, plate and bouquet, and place on a table, leaving on plate around the base of the bell glass a little water, to keep the air from entering. The flowers in this situation will be preserved in all their freshness for several weeks, and their beauty is increased by a great number of bubbles of gas produced by the respiration of the leaves, and which attach themselves to the leaves, looking like pearls. The edge of the plate and the water that it contains should be concealed by a light bed of moss in which are set some flowers. A bouquet thus arranged produces a charming effect, especially in the evening.—*Good Housekeeping*.

Our Spelling.—President White, of Cornell, calls our system or, more properly, our want of system of spelling, “the most illogical the world has ever seen.” There is no sense or reason in it to win the confidence of thinking men. In the average class of our American colleges, there is but a small proportion of accurate spellers. Here is one of the strongest arguments for a reform. If the best of us cannot learn to spell well; what can we expect of the ordinary writer? There is no other branch of education so difficult, and yet there is no other branch that could be made so simple. Why do we persist in retaining such absurdities?
T. W. HUNT.

Sticky Fly Paper.—Take of—

Resin.....	14 parts.
Burgundy pitch.....	4 parts.
Molasses.....	4 parts.
Linseed oil.....	4 parts.

Heavy calendered paper should be used, or in a few days your fly paper will be sticky on both sides.

Lice and other parasites are removed from the hair quicker and better by a decoction of quassia, to which a little borax and glycerin have been added, than by almost any other known means.—*National Druggist*.

For chafing, caused by heat, an ointment made of 1 part of boracic acid, 10 parts of talc, and enough vaselin, or of a mixture of vasolin and lanolin to make it easily applied, heals like magic and gives instant relief.—*National Druggist*.

Change of Spelling for the Worse.—Shakespeare wrote begger, biskets, tel, pedler, perswade, simbols, dram, brest, hart. We write,—beggar, biscuits, tell, peddler, persuade, symbols, drachm, breast, heart.